

JA - 0276

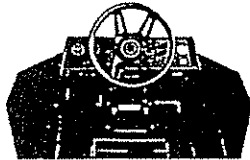


JA - 0277

Get behind the power of a front-drive Steiner.

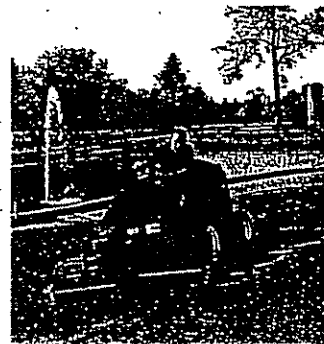
m o d e l **220**

With front-wheel drive, the Steiner 220 offers superb performance, durability, traction and stability where conventional tractors fall short. Total control is yours with a foot-pedal hydrostat and rear power steering that enables the Steiner 220 to handle effortlessly around trees and other obstacles. Few turf tractors have a lower center of gravity than the 220, which positions you comfortably in the middle of the tractor for added stability. Best of all, our unique Quick-Hitch™ attachments make it easy to get the job done with speed and precision.



ACCESSORIES

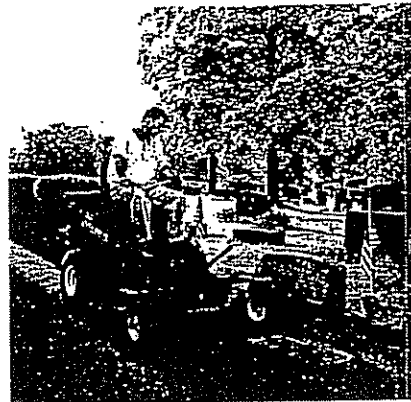
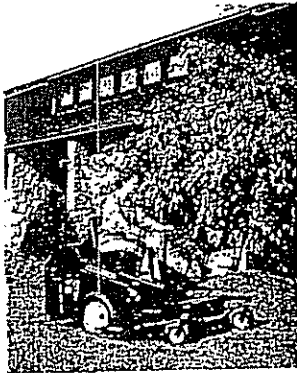
ROPS APPROVED ROLL BAR
REAR WEIGHT BAR
CAB
SUSPENSION SEAT
WHEEL WEIGHTS



A zero turning mower with zero deficiencies.

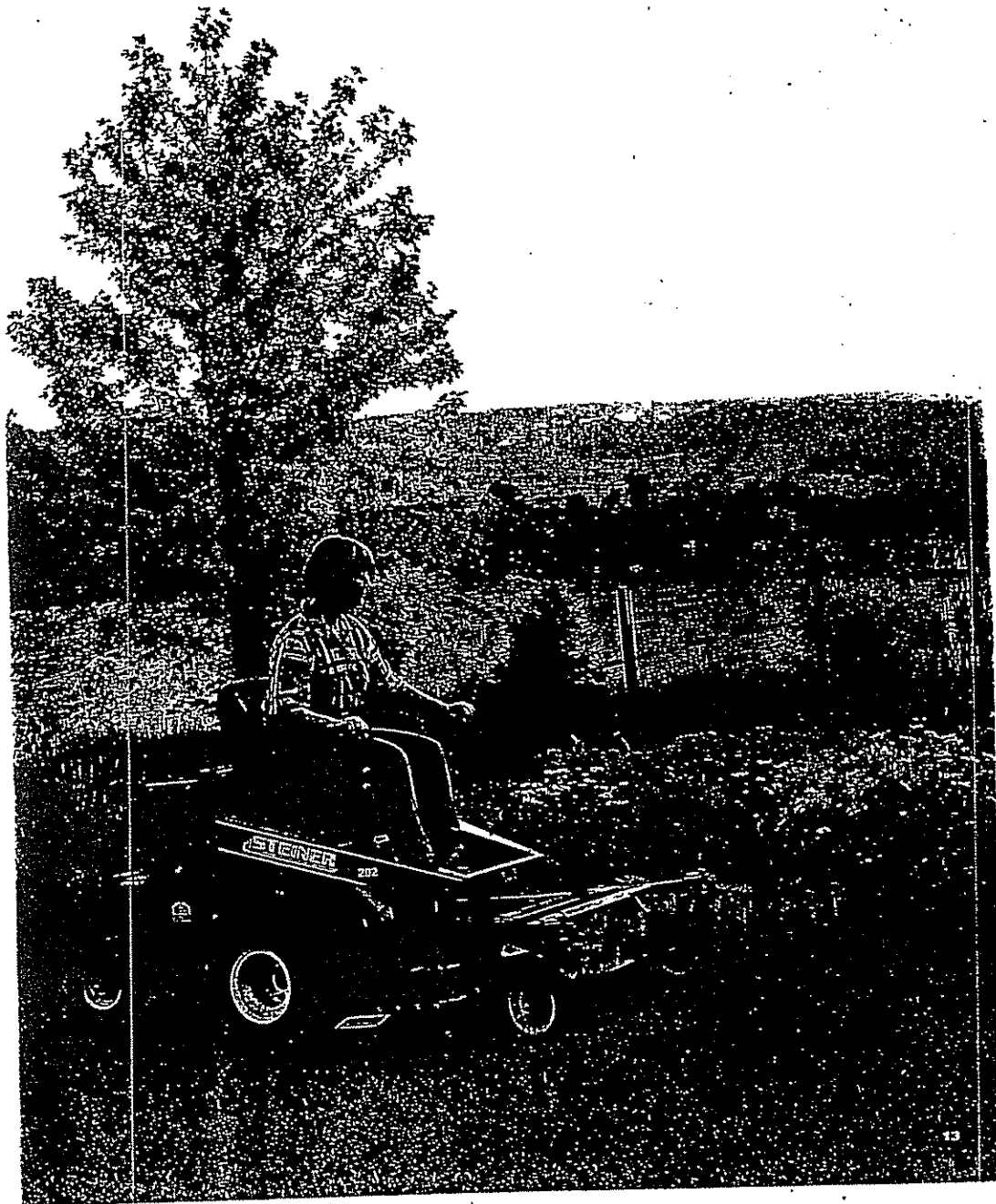
m o d e l **202**

For those requiring a dedicated mowing machine, the Steiner 202 combines a zero turning radius with our passion for zero defects. Not only does it mow rings around other mowers, the Steiner 202 floats over uneven terrain with a unique mower deck that flexes as it goes for an even, clean cut. And no mower is easier to operate. Twin hydrostatic controls provide a steady ride, smooth power and easy handling — with minimal training — while a single park lever and cutting height handle allow for fast, easy adjustments. (Mulching adapter kit available.)



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JA - 0280

Accessories

Accessories add comfort, safety

and utility.

For added comfort, safety and utility,

choose from optional accessories that

provide Steiner quality with a custom

design and fit. For more information

about these and other accessories for

your turf tractor, contact your

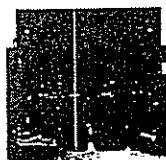
authorized Steiner dealer.



Roll Bar



Dual Wheels



225 Weight Bar Kit



410 Weight Bar Kit

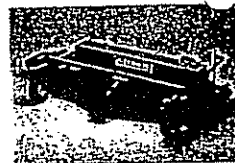


Three Point Hitch



430 Max Weight Bar Kit

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Rotary Mowers

Full-floating, 3-blade rotary mowers feature tapered roller bearing spindle assemblies. Cutting height is controlled by the front caster wheels and full-length rear roller. Front-mounted design gives exceptional visibility for maneuvering and trimming. High-capacity discharge chutes provide even distribution of clippings.

Rotary Mowers Side Discharge

Built-in flexibility of rotary mower allows it to follow the contour of the terrain. High-capacity side discharge.

Model MD448

Overall width with discharge chute 60 1/2"
Cutting width 47"
Cutting height 1" to 4 1/2"
Mower drive PTO belt
Spindle drive Single "V" belt
Spindles Tapered roller assemblies
Blades 3 blades, 19 1/4"
Discharge Side
Wheels 10 x 3.5 semi-pneumatic
Weight 330 lbs.

Model MD480

Overall width with discharge chute 73"
Cutting width 59 3/8"
Cutting height 1" to 4 1/2"
Mower drive PTO belt
Spindle drive Single "V" belt
Spindles Tapered roller assemblies
Blades 3 blades, 20 1/2"
Discharge Side
Wheels 10 x 3.5 semi-pneumatic
Weight 360 lbs.

Model MD472

Overall width with discharge chute 85"
Cutting width 72"
Cutting height 1" to 4"
Mower drive PTO belt
Spindle drive Single "V" belt
Spindles Tapered roller assemblies
Blades 3 blades, 24 3/4"
Discharge Side
Wheels 10 x 3.5 semi-pneumatic
Weight 470 lbs.

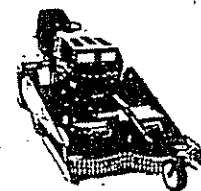


Rotary Mowers

Mulching/Rear Discharge

This mower becomes a mulching mower or a rear discharge mower with the installation of the proper blade and baffle options.

Overall width 60 3/4"
Cutting width 50"
Cutting height 1 1/2" to 4"
Mower drive PTO belt
Spindle drive Single "V" belt
Spindles Tapered roller assemblies
Wheels 10.25 x 3.25 semi-pneumatic
Blades 3 blades, 20 3/4"
Weight 330 lbs.
Rear discharge 320 lbs.
Mulching option 400 lbs.



Tras Farm Mower

The tree farm mower is designed to fit the Model 430 Max and 410 tractor. Out-front deck provides good visibility for two-sided trimming. Single front caster wheel controls the cutting height of the two rotary blades.

Overall width 45 1/2"
Cutting width 44"
Overall length 78" including wheel shields
Cutting height 7" to 5"
Mower drive PTO belt
Spindle drive Gearbox and 2 V-belts
Spindles 1" ball bearings
Blades 2
Discharge Rear
Weight 272 lbs.



Silly Scoop

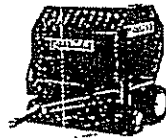
A quick, easy way to move loose materials or excavate small areas. In fact, you can use it for virtually anything that would normally require a wheelbarrow.

Overall width 48"
Overall height 18"
Overall length 33"
Width of bucket 44"
Bucket capacity 3 1/4 cu. ft.
Dumping Hydraulic controlled
Ground clearance (transport) 12" on Model 430 Max
Ground clearance (dumped) 8" on Model 430 Max
Weight 135 lbs.

**V-Blade**

The V-blade is designed for easy snow removal. Electro-hydraulic independent blade wing angling allows easy conversion from V-blade to inverted scoop or straight blade while in motion.

Overall width	63 1/4"
Cutting width	
straight	58"
scoop	45"
v-blade	53"
Overall height	21"
Overall length	31"
Blade height from cutting edge	21"
Angling	30° left and right, front and back
Skid shoes	Adjustable
Forward tilt	Spring-loaded
Cutting edge	
2 position	3/8" x 4" hardened
Weight	245 lbs.

**Lawn Sweeper**

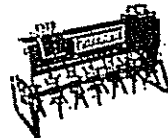
Clean sweep your lawn of cuttings and fallen leaves. Flacking action gets much more into the unit before you need to unload.

Overall width	62"
Overall height	62"
Overall length to hitch	62"
Width of pickup	40"
Brush	3-paddle staggered
Depth wheels	Semi-pneumatic
Hitch	Right, left or center post controlled
Carrying capacity	24 cu. ft.
Weight	530 lbs.

**Terra Rake**

The terra rake is an excellent tool to use in preparing ground for seeding. This front-mounted rake has gauge wheels that can be positioned to the front or rear.

Overall width	67"
Maximum working width	66"
Minimum working width (angled)	61"
Working positions	Hydraulically controlled
Self-leveling device	Spring-loaded
Number of teeth	35
Weight	270 lbs.

**Core Aerator**

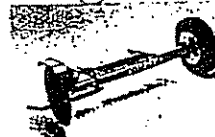
Improve turf with this 40" wide core aeration. Penetrates turf with seven independent 3/4" core line assemblies which are designed for ease of turning while operating. Weight box carries additional weight if extra penetration is needed.

Overall width	45 1/2"
Working width	40 1/4"
Overall height	28 1/2"
Overall length	30"
Main shaft bearings	Greasable 1 1/4"
Aerating tines	7 steel whetstones/pressurized subconcentric fling
Tines	6 per wheel, 3/4" core lines
Aerating width (actual)	39"
Aerating width (effective)	45 1/2"
Aerating depth	Up to 3 1/2"
Aerating pattern	8 1/2" x 7" (3.6 holes sq.ft.)
Weight	390 lbs. with 4 weights

**Stump Cutter**

Get rid of stumps and prune above-ground roots quickly, easily and neatly. Tough 16" diameter cutterhead is driven by a PTO belt with a right-angle gearbox. Hardened cutters are located to allow movement from side to side, or from top of the stump.

Overall width	34 1/2"
Overall height	18"
Overall length	37"
Cutterhead	24 hardened cutters
Cutterhead diameter	16"
Cutterhead width	3 1/4"
Cutterhead speed	1600 rpm
Cutting depth below ground level	5"
Maximum recommended cutting height above ground level	5"
Weight	250 lbs.

**Disc Edger**

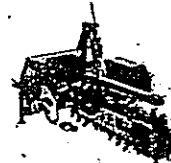
Cut a neat edge along paths, sidewalks and curbs. 16" concave disk adjusts for angles and raises and lowers hydraulically. Pneumatic tire controls height.

Overall width	
fully closed	50"
fully closed w/disk guard	53"
fully extended w/disk guard	65"
Cutting width from center of tractor	
closed position	25 1/2"
extended position	35 1/2"
Disc	15" hardened concave type
Operation	Right or left hand
Ground clearance (raised)	9" (on Model 430 Max)
Weight	110 lbs.

**Reel Mower**

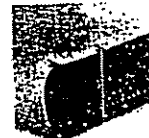
Reel mower heads are individually supported and float smoothly over bumps and dips. The reels are hydraulically driven, independent of the forward speed of the power unit.

	RM574	RM574
Cutting width	74"	84"
Cutting height	1/2" to 1 3/4"	1/2" to 1 3/4"
Overall width	81 1/2"	91 1/2"
Transport width	77 1/2"	87 1/2"
Blades per cylinder	4-blade	8-blade
	8-blade	30"
Reel cutting width	26"	27 1/2"
Reel overlap	2"	2 1/2"
Weight	480 lbs.	515 lbs.

**Brancher**

The trencher easily follows line of trench, cutting to a maximum depth of 28". Depth of cut is adjustable with the depth indicator gauge easily visible.

Overall width	53"
Overall length	5' 4"
Overall height	34"
Auger diameter	12"
Chase speed	550 h/minute
Drive shaft diameter	1 1/2"
Cutting depth	28"
Cutting width	4 3/4"
Weight	360 lbs.

**Power Angle Blade**

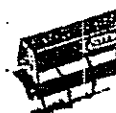
Move dirt or snow with and 60° blades. Feature power angle and safety. Reversible cutting edge. Comes complete w skid shoes.

Overall width B0248	48"
B0200	60"
Overall height	19"
Overall length	32"
Hydraulic angling	30"
Skid shoe	4c
Forward tilt	5c
Reversible cutting edge	3"
Ground clearance	14"
Weight B0248	165"
B0200	145"

**Rotary Sweeper**

Ideal for clearing snow and light snow on paths, lawns, sidewalks and driveways. Controlled nylon for left and right-hand. Bevel gearbox driven, wheels available.

Overall width	81"
Overall height	18"
Overall length	44"
Working width	54"
Hydraulic angling	30"
Speed of broom	300
	and
Ground clearance	10"
Rotation springs	5c
Weight	430

**Aerator**

Improve turf health with wide attachment. 5" to penetrate deep. Weigh additional weight if extra is needed. Ground dri greaseable bearings.

Overall width	45"
Working width	40"
Overall height	22"
Overall length	29"
Main shaft bearings	6c
Tines	18
Weight	5"



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Model 430 Max



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Tiller

Loosen dirt for gardens or turf plantings. Provides 48" working width and a tilling depth of up to 6" in loose soil. Rotor is chain driven and has a solid 1 1/2" steel shaft with 24 cutting tines.

Working width	48"
Working depth	6" max.
Overall height	29"
Overall width	54"
Overall length	36"
Tines	24 replaceable, hardened
Drive	Chain drive from tractor in reverse motion
Operation	Tractor in reverse motion
Bearings	Greaseable
Weight	305 lbs.



Boom Mower

The boom mower simplifies and eases areas such as ditches, banks, pond edges, and other hard to reach places.

Overall width:	arm extended 115"
Overall width:	arm up 52"
Overall height:	arm up 70"
Reach of arm:	52" from center line
Tilt of mower head:	75° arc (7° at 68° or 11)
Angle of operation:	30° below horizontal
Width of cut:	45" above horizontal
Height of cut:	1 1/8" to 1 5/8"
Drive:	Belt drive
Mower gearbox:	Right angle
Weight:	435 lbs.
Counterbalance:	Four 50 lb. weights
Gross weight:	635 lbs.



Chipper/Shredder

The Steiner chipper/shredder is designed to grind, shred and chip a variety of materials into a usable processed material to enrich and beautify your landscape. Blower attachment optional.

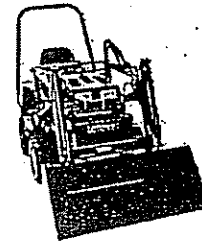
Overall width	35 5/8"
Overall height	44 1/2"
Overall length	53 1/4"
Chipper knives	4 hardened knives
Maximum material size for chipper	4" diameter
Maximum material size for shredder	1 1/2" diameter
Weight	430 lbs.



Power Blower

150 mph blowing power quickly clears leaves and debris. Also blows water from low-lying areas. PTO belt-driven unit has an 8-blade blower fan and directional discharge chute. Also features an anti-scalp roller.

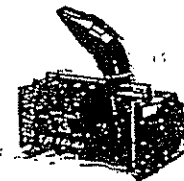
Overall width	33"
Overall height	18 1/2"
Overall length	25"
Skid shoe	Fixed
Fan	8-blade, welded
Fan diameter	14"
Fan width	8"
Fan speed	Same as engine rpm
Air flow	3000 cfm at max rpm
Ground clearance in raised position	5" on Model 430 Max
Weight	95 lbs.



Loader

This 48" wide bucket has transport lift of 200 lbs. A weight bar with six weights is required for operating the loader on the Model 430 Max tractor. Loader has self-contained hydraulic pump and oil reservoir powered by tractor's front PTO pulley.

Lift height	73"
Maximum lift capacity	365 lbs.
Recommended maximum transport lift capacity	200 lbs.
Reach raised	90"
Lowered	27"
Bucket volume	8 cu. ft. (approx.)
Bucket width	48"
Weight	702 lbs.



Snow Blower

Moves large volumes of snow from sidewalks, driveways and small parking lots. Features 14" auger fed and hydraulically controlled chute with fingertip control. Height of heavy-duty wear bar adjusts with skid shoes. Belt driven.

Overall Width	48 1/2"
Overall Height	51"
Overall Length	37"
Opening Size	25" high x 45" wide
Auger	14" diameter
Blower	open center 20" diameter 3 blade
Auger Speed	175 rpm
Blower Speed	800 rpm
Chute	9" diameter, 190° rotation
Height of Cut	Adjustable skid shoes, 0" to 1 1/4"
Weight	425 lbs.

NOTE: These specifications are subject to change without notice.

Not all specifications are shown for each attachment. For complete information, contact your nearest Steiner dealer.

Attachments

Attachment	Model 202	Model 220 Max	Model 410	Model 220
Aerator, spike	•	•	•	•
Aerator, core	•	•	•	•
Blade, 60° power angle	•	•	•	•
Blade, 48° power angle	•	•	•	•
Blade, sand	•	•	•	•
Blade, V-blade	•	•	•	•
Chipper/shredder	•	•	•	•
Disc edger	•	•	•	•
Loader, front end	•	•	•	•
Mower, boom	•	•	•	•
Mower, 48" rotary	•	•	•	•
Mower, 60" rotary	•	•	•	•
Mower, 72" rotary	•	•	•	•
Mower, rotary mulch/rear discharge	•	•	•	•
Mower, tree farm	•	•	•	•
Mower, triplex reel 4-blade, 74"	•	•	•	•
Mower, triplex reel 6-blade, 74"	•	•	•	•
Mower, triplex reel 9-blade, 74"	•	•	•	•
Mower, triplex reel 6-blade, 84"	•	•	•	•
Power blower	•	•	•	•
Slip scoop, 44"	•	•	•	•
Snow blower, 48"	•	•	•	•
Stump cutter	•	•	•	•
Sweeper, lawn	•	•	•	•
Sweeper, 54" rotary	•	•	•	•
Terra rake	•	•	•	•
Tiller	•	•	•	•
Trencher	•	•	•	•

NOTE: Model 202 is exclusively a mowing machine.

Our tractors are capable of many things.

All it takes is five minutes or less.

Versatility is as much a part of the Steiner story as superior engineering or long-term reliability. Using our Quick-Hitch™ attachments, your Steiner becomes capable of almost any turf or grounds maintenance task within one to five minutes. Discover why so many Steiner owners think of their turf tractors as true all-purpose machines.

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Specifications

	Model 410	Model 415	Model 420	Model 425	Model 430
Dimensions					
Overall width	56" (142 cm)	44"	43 1/2"	54"	58"
Overall length	81" (206 cm)	64"	68"	82"	91 1/2"
Overall height	48" (122 cm)	46"	47"	45"	45"
Wheelbase	49" (125 cm)	38"	39"	50"	43"
Turn radius	63" (160 cm)	45"	43"	14"	zero
Weight	1520 lbs. (690 kg)	1000 lbs. air-cooled 1100 lbs. water-cooled	950 lbs.	1185 lbs. - Onan 1235 lbs. - Kubota	1214 lbs. (includes deck)
Engine	Kubota 905, 23.5 hp water-cooled	Onan P220 Performer, 20 hp air-cooled Kubota Diesel D722, 21 hp water-cooled Kubota Gas WG750, 21 hp water-cooled Kohler Command V-Twin, 25 hp air-cooled	Onan P216 Performer, 16 hp air-cooled	Onan P220 Performer, 20 hp air-cooled Kubota Diesel D600B, 16.5 hp water-cooled Kubota Gas WG750, 21 hp water-cooled	Onan P220 Performer, 20 hp air-cooled
Drive Train					
Transmission	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic
Transaxles	Peerless 2500, dual-speed	Peerless 2500, dual-speed	Peerless 2500	Peerless 2600 2-speed w/diff lock	Peerless 1300.
Speeds	Forward: 0-9 mph, high 0-4.7 mph, low Reverse: 0-5.7 mph, high 0-2.9 mph, low	Forward: 0-8.5 mph, high 0-4.4 mph, low Reverse: 0-5.3 mph, high 0-2.8 mph, low	Forward: 0-9 mph Reverse: 0-7 mph	Forward & Reverse: 0-11 mph, high 0-6 mph, low	Forward: 0-8.25 mph Reverse: 0-4 mph
Steering	Hydraulic power steering	Hydraulic power steering	Hydraulic power steering	Hydraulic power steering	Twin steering w/independent control of each drive wheel
Brakes	Dry disc type (front & rear)	Dry disc type	Dry disc type	Individual wheel drum	Dynamic braking through hydrostatic transmission Manual parking
Tires					
Turf type	Turf type, 24 x 13.00-12, 4-ply Bar type, 26 x 12.00 - 12	Turf type, 20 x 10.00-8, Turfmate Traction Bar type, 21 x 11.00-8, Rawnhda	Turf type, 20 x 10.00-8, Traction Bar type, 21 x 11.00-8, Rawnhda	Drive: 23 x 10.5-12 Goodyear Softrac, 2-ply Rear: 18 x 8.5-8 Ribbed, 4-ply	Front: 20 x 8.00 x 10 4-ply rating tubeless Rear: 13 x 5.00 x 6 4-ply rating tubeless
Electrical					
Starting	12 volt, key switch	12 volt, key switch	12 volt, key switch	12 volt, key switch	12 volt
Battery	12 volt, group 26	12 volt, group 26	12 volt	12 volt, group 26	12 volt, maintenance free
Charging	30 amp auto				
Fuel System					
Tank capacity	7 gallons, US	6 gallons, US	5 gallons, US	6 gallons, US	7 gallons, US

These specifications are subject to change without notice.

We invite you to experience Steiner engineering at your nearest Steiner dealer.

STEINER

Steiner Turf Equipment, Inc.
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P.O. Box 504
Dalton, OH 44618-0504
330-828-0200
Fax 330-828-1008

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JA - 0285

JACOBSEN®

HR-5111™ **4WD Hydraulic Mower**



The Professional's Choice on Turf

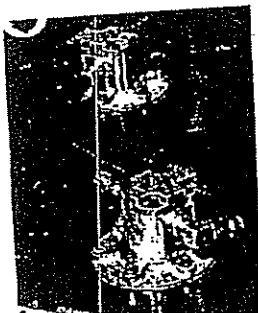
HR-5111: The All-Hydraulic

The HR-5111 delivers a productive 11-foot cut to roughs, parks, and other large turf areas. Its three all-hydraulic mowing decks, four-wheel-drive (4WD) traction, and a comfortable operator station, make the HR-5111 the right mower for your big jobs.

All-Hydraulic, High-Production Mowing
The HR-5111's revolutionary all-hydraulic, rear discharge decks deliver the best quality cut of any high-production mower. Individual hydraulic motors drive each blade for unmatched cutting power.

The floating-deck design, with large caster wheels and anti-scalp rollers, follows turf contours and reduces the risk of scalping. Cutting heights are adjustable from 1 to 5 1/2 inches. Spring washers on side deck mounting arms absorb impact. Mow with one, two, or all three decks, to match conditions.

The HR-5111's agile, compact design with hydrostatic transmission and rear-wheel power steering, means close trims around trees and obstructions. In open areas, the HR-5111 cuts up to 65 acres per day.



**No Belts,
No Pulleys,
No Kidding**

Individual hydraulic motors power each of the HR-5111's blades for a quality cut without the hassle of belts, pulleys, idlers, deck lids, or PTO shafts. Blades rotate in opposite directions for even clippings dispersal.

4-Wheel-Drive Traction

Hydrostatic 4WD with differential lock, tackles tough hills that stall the competition. A hydraulic weight-transfer system shifts the weight of the deck to the vehicle for hill climbing. Unlike mechanical 4WD, hydrostatic 4WD rotates each wheel at the correct speed during turns, to prevent turf scuffing and provide full traction.

Built For Trouble-Free Operation

The HR-5111 spends its time working. All-hydraulic decks mean no belts, deck lids, blade pulleys and idlers to fix. Each motor has self-lubricating spindles for less maintenance.

The wing decks tilt vertically when raised, and the front deck tilts vertically by removing two pins at the rear of the

deck, for easy cleaning and servicing. Diagnostic ports make it easy to check hydraulic pressures.

Economical Diesel Power

The HR-5111 is powered by a reliable, efficient, 51-horsepower, liquid-cooled diesel engine. The engine is fully enclosed and isolation mounted for cleaner, quieter operation. A top-mounted, heavy-duty air cleaner protects the engine from harmful dirt and clippings.

The hood tilts up and back for full access to the engine. The hydraulic oil cooler slides away from the radiator for cleaning. The HR-5111's durable fiberglass body keeps its good looks, even in harsh conditions.

■ Adjustable seat, cruise control, tilt steering wheel for operator comfort.

■ Hydrostatic 4WD for sure traction without turf damage.

■ Ergonomic design puts controls, instruments in easy reach, sight.

■ Floating decks, casters, anti-scalp rollers for superior quality cut.

■ Rear-wheel power steering, compact design for close trimming.

■ All hydraulic decks need less maintenance, have smoother discharge.



AWD High Production Rotary

The box channel steel frame and heavy-duty axle can handle years of mowing. And it's backed by a two-year/1,500-hour warranty.**

Built For Operator Comfort

Your operators will like the HR-5111's comfortable high-back seat, cruise control and tilt steering wheel. Good visibility and ergonomic controls keep them productive without strain. A full array of gauges and warning lights keep operators aware of vital mower functions. For extra protection, a horn sounds if engine coolant or hydraulic oil begin to overheat.

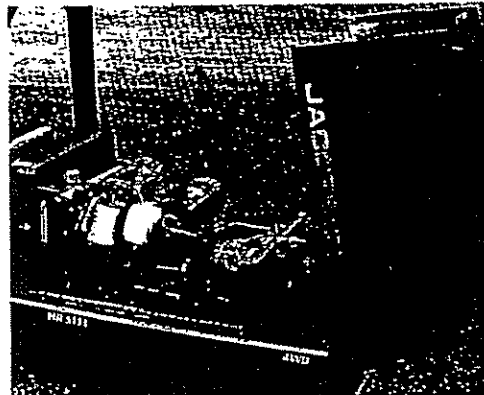
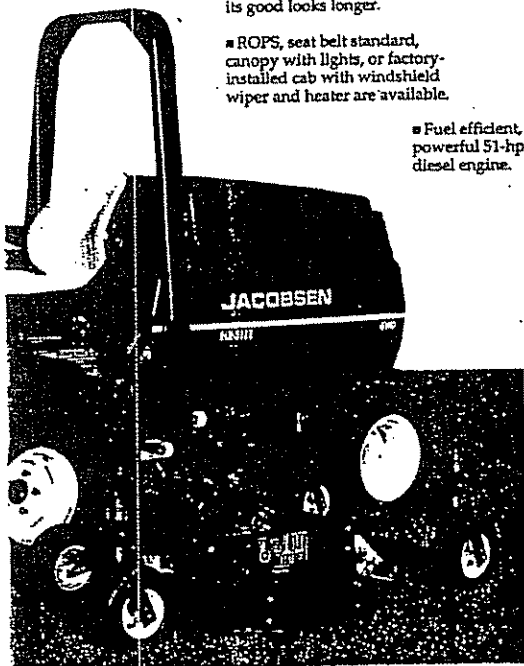
A ROPS and seat belt are standard on the HR-5111. A canopy with lights and flashers, or a factory-installed cab with windshield wiper and heater are also available.

■ Diagnostic ports to check hydraulic pressures.

■ Fiberglass body keeps its good looks longer.

■ ROPS, seat belt standard, canopy with lights, or factory-installed cab with windshield wiper and heater are available.

■ Fuel efficient, powerful 51-hp diesel engine.



HR-5111's 51-hp diesel is fully enclosed to keep out debris. Hood tilts up and back for access to engine.

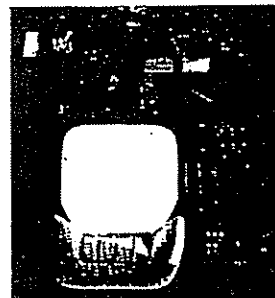
The HR-5111 features dynamic braking, along with heavy-duty, hydraulic disc brakes on the drive wheels for sure stopping.

For year-round versatility, a 62-inch snow thrower and 72-inch rotary brush are also available.

For quality, high-production mowing, versatility, and operator comfort, in a reliable package, call your Jacobsen dealer today for a demonstration of the HR-5111.

*Consult your owner's manual for safe operation on slopes.
**See your Jacobsen dealer for complete warranty details.

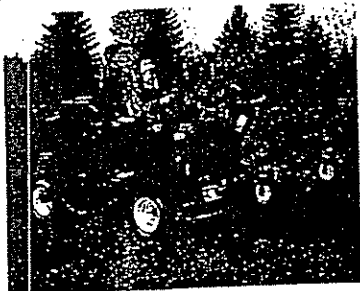
Adjustable suspension seat, tilt steering wheel, cruise control for operator comfort. Complete instrument panel keeps operator informed of mower functions at a glance.



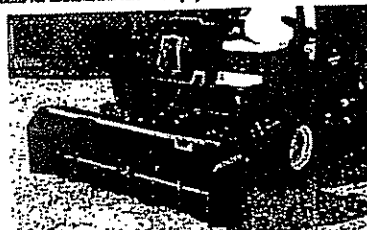
SPECIFICATIONS

ENGINE:		Model..... Kubota V2203D 4-cylinder, liquid-cooled, diesel
Bore and Stroke.....		3.43 in. x 3.64 in. (87 mm x 92.4 mm)
Compression Ratio.....		22:1
Horsepower (at 2,800 rpm).....		51 (38 kW)
Displacement.....		134.1 cu. in. (2197 cc)
Torque (at 1,200 rpm).....		109 ft. lbs. (147.8 Nm)
Fuel Injection Pump.....		Bosch
Air Cleaner.....		Remote Cyclopac cartridge type
Cooling.....		Pressurized, sealed cooling system, 7-blade fan, coolant capacity: 2 gal. (7.6 L)
Lubrication.....		Fully pressurized
Oil Filter.....		Replaceable spin-on type
Electrical System.....		45 amp alternator, 750 CCA heavy-duty battery, circuit breakers
VEHICLE:		
Transmission.....		Hydrostatic closed-loop system, variable displacement piston pump, fixed displacement piston motor to front differential axle with integral gear reduction, motors on rear wheels electro-hydraulically engage/ disengage for 4WD
Traction System.....		Single speed, differential lock electro-hydraulically activated
Differential.....		Hydraulic
PTO Drive.....		3 speed manual valve
Implement Lift.....		Power, rear wheel, lift steering wheel
Steering.....		25 x 12-12
Tires: Front (Drive).....		23 x 10.5-12
Rear (Steering).....		ServiceDynamic braking front transmission, hydraulic disc brakes on front wheels
Brakes.....		Independent disc on drive line
Parking Brake.....		17 gal. (64.3 L) reservoir, "O" ring face seal fittings, 10 micron full flow filtration, suction screen at hydrom, oil cooler, diagnostic test ports
Speeds: Forward (2WD).....		0-15 mph (0-24.1 km/h)
(4WD).....		0-8.4 mph (0-13.5 km/h)
Reverse (2WD).....		0-6 mph (0-9.6 km/h)
(4WD electronically locked).....		
Instruments.....		Voltmeter, hourmeter, tachometer, water temperature gauge, fuel gauge
Indicators.....		Glow plug, engine oil pressure, water temperature, air filter restriction, hydraulic oil filter pressure, oil temperature, hydraulic low charge pressure, filter pressure
VEHICLE:		
Controls.....		Throttle, hydraulic lift/lower, ignition switch, glow plug switch, PTO switch, individual mower switches, hydro pedal, brake, differential lock switch
Fuel Capacity.....		20 gal. (75.7 L)
Seal.....		Adjustable high-back, suspension
DECK:		
Size.....		(1) 64 in. (1.63 m) front deck, fully floating (2) 62 in. (1.56 m) wing decks, fully floating (decks can be run in any combination of 1, 2 or 3)
Blades.....		(7) 23 in. (58 cm)
Blade Drive.....		Hydraulic motors with integral bearings, self-lubricating
Cutting Width.....		134 in. (3.40 m)
99 in. (2.51 m) with one wing deck raised, 63.5 in. (1.61 m) with both wing decks raised		
Discharge.....		4 x 11 pneumatic tires
Caster Wheels.....		1 in. to 5.5 in.
Cutting Heights.....		24.5 mm to 139.7 mm
SNOW THROWER:		
Drive.....		Hydraulic
Width.....		62 in. (1.57 m)
Cutting Height.....		23 in. (58 cm)
Length.....		34.875 in. (75 cm)
Chute Height.....		53 in. (1.3 m)
Auger Diameter.....		14 in. (35 cm)
Electric Chute Rotation.....		220 degrees
Fan Flouting Diameter.....		18 in. (45 cm)
Chute Diameter.....		10.5 in. (26 cm)
Weight (approx.).....		430 lbs. (204.5 kg)
ROTARY BRUSH:		
Drive.....		Hydraulic
Diameter.....		25 in. (63 cm)
Width.....		72 in. (1.83 m)
Maximum sweep.....		62 in. (1.57 m)
Caster wheels.....		(2) 4 in. x 11 in. pneumatic tires
Weight (approx.).....		325 lbs. (147.6 kg)
Brush Material.....		Wafer-style polypropylene
Brush Swing.....		Mechanical, lock positions 30 degrees right, left, straight Front protective flap
DIMENSIONS:		
Weight (transport).....		3,361 lbs. (1,534 kg)
Height (with ROFS).....		81 in. (2.05 m)
Width (mowing).....		139 in. (3.53 m)
Width (transport).....		93.5 in. (2.37 m)
Length.....		144 in. (3.66 m)
Turning Radius (uncut circle).....		28 in. (71 cm)
Wheelbase.....		67.75 in. (1.72 m)
Ground Clearance.....		8 in. (203 mm)
ACCESSORIES:		Mulcher kit, Rear wheel weights, Auxiliary work light kit, T.U.V. (road light kit), Canopy with liner, headlights, flash- ers, Cab with wiper, heater (factory installed)

NOTE: Specifications, while correct at time of printing, may change without notice.
This product has been tested and complies with ISO 14190, ANSI voluntary safety
specifications for commercial turf care equipment.



Wing decks fold tight to mower for narrow
93.5-inch transport width.



Add a 62-inch hydraulic snow thrower, or 72-inch
rotary brush for year-round use.

JACOBSEN TEXTRON

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Grounds and Industrial Management

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Groundsmaster® 580-D Mowers

- The leader in productivity. This large scale rotary mower combines 16 foot productivity with 18 inch trimability.
- This agile performer mows up to 14.5 acres per hour. It tackles tough, tall or wet grass and lets you adjust its cutting widths from 8.5 to 16 feet on the fly.
- You can trim less than an 18 inch circle around trees; around a 90° corner; or turn back 180° on track with no uncut grass remaining. Individual dual wheel brakes assist to provide smooth control with any turn.
- Three independent cutting units raise or lower on the go. Side decks raise to mow either 92 inch or 12 foot swaths.
- The Breakaway Feature is a Toro exclusive. Should the operator misjudge distance, the outboard cutting unit will pivot away on a rotating push arm from the object that's been hit. To reset, simply raise the cutting unit.
- Optional 4WD available.
- Access to the engine, transmission and cooling system is easy and fast by snapping off a few panels and removing shrouds.
- The Groundsmaster 580-D is truly a machine for all seasons with the these attachments: Cab with ROPS, Snowthrower, Road Light Kit, Canopy with 2 Post and Rotary Broom.

Groundsmaster Rotary Mowers



►Groundsmaster® 200

►Groundsmaster® 300
72 Flexdeck™ for 300 Series

►Groundsmaster® 3000

►Groundsmaster® 3500-
D

►Groundsmaster® 455-D

Groundsmaster® 580-D

SPECIFICATIONS

2 YEAR WARRANTY

CUSTOMER SUPPORT



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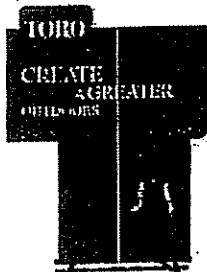
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Specifications for GroundsMaster® 580-D

GROUNDMASTER® 580-D, MODEL 30581 SPECIFICATIONS*	
ENGINE	Mitsubishi Model S4F-T, four cylinder in-line, 4 cycle, liquid cooled, turbo-charged diesel engine; 80 hp (59.6 kW) at governed maximum of 2750 rpm. 80.4 cu. in. (2956 cc) displacement, vertical overhead valve, direct injection. Forced feed lubrication w/ trochoid gear pump. 8.5 quart (8 liter) capacity. 17:1 compression ratio. 12 volt (2.2 kW) gear reduction starter. Heavy duty centrifugal air cleaner with replaceable element. Draws air from screened air intake. Muffler double wrapped with insulation and mounted under hood. Engine hood supported when raised by gas cylinder suspension. Lined with barrier type sound reduction material. Easily removed side panels provide improved engine access.
RADIATOR AND OIL COOLER	Magnetically latched air intake grill and shielding are easily removed to provide access to the mid-mount agricultural-type radiator with wide spaced fins (5 fins/in.). Oil cooler hinges away from the radiator to provide easy service access. 3.9 gal. (14.7 liter) coolant capacity. Variable speed radiator fan controlled by engine temperature. Full flow hydraulic oil cooler, (7 fins/in.).
FUEL SYSTEM	Direct mechanical injection system with replaceable fuel filter and water separator. Front console warning light indicates water in fuel. Fuel capacity: 28 gal. (106 liters), No. 2 diesel fuel.
FRAME CONSTRUCTION	5" x 9 lb/ft welded structural steel channel. Six tie down loops; 2 front, 2 center and 2 at rear of frame.
TIRES/WHEELS	Front (2) 31 x 12.50-15, 8-ply high flotation turf tires w/ tubes. Rear (2) 23 x 10.50-12, 6-ply tubeless turf tire.
BRAKES	Front multiple disc brakes. Fully sealed in cast housings. Hydraulic service brake via a brake pedal operated by the right foot. Mechanical steering brakes via two pedals which lock together for parking brake function. Dynamic braking through closed-loop hydrostatic drive.
STEERING	Tilt 15.5" (39 cm) steering wheel and tilt steering tower; released and locked by a patented single lever control. Dual hydraulic cylinder power steering for extra sharp turning. Eaton Charlyn Series 4 steering valve, load reaction type, 1500 psi (103.4 bars) rated.
TRACTION SYSTEM	Hydrostatic closed loop system, consisting of Sundstrand Series 40 hydrostatic pump and two speed motors, and Auburn Model 6 industrial planetary gear reduction at the drive wheels. Includes system reliefs of 5000 psi (344.8 bars) and bypass valve for towing. Planetaries for radial load rated @ 10,000 lbs. (4536 kg) and output torque of 50,000 lb-in. Maximum system flow is 28 gpm (105.9 liter per minute). Hydraulically assisted single foot operated traction pedal with adjustable speed stop controls forward/reverse ground speed. Electromagnetic speed control actuated from console by push button switch. Disengage speed control by service brake or on/off switch. Control of speed can be changed without disengaging.
GROUND SPEED/CLEARANCE	Infinitely variable speed. Forward speeds: 0-7.5 mph (12.1 km/h) - mow; 0-20 mph (32.2 km/h) - transport. Reverse speeds: 0-3 mph (4.8 km/h) - mow; 0-8 mph (12.9 km/h) transport. Ground clearance: 8" (20.3 cm).
CONTROLS	Individual deck lift levers, ground speed high range/low range switch, etc.

Grounds and Industrial Management

	PTO switch, hand operated throttle, speed control on/off switch, speed engage button and ignition switch. Single implement shut-off control. Steering tower and wheel tilt lever. Service brake pedal, steering brake pedals with parking brake latch, foot operated traction pedal.
GAUGES/ DIAGNOSTICS	Gauge package includes fuel gauge, engine water temperature, engine hour meter, and engine oil pressure. An indicator light and audible warning of low oil pressure, high water temperature, no charge, water in fuel, air cleaner service, hydraulic oil filter service, low hydraulic oil, and high hydraulic oil temperature. Indicator lights on steering tower to show parking brake on, speed control engaged, and high range ground speed. 8 hydraulic test ports easily accessible without removing panels to diagnose system pressures. The Automated Control Electronics™, ACE™, system allows precision timing and control of machine functions for maximum reliability. Standard diagnostic display connects to an electronic control unit to pinpoint any electrical problems quickly and easily. Available DATA LOG™ system allows mechanic to find intermittent problems.
INTERLOCK SYSTEM	Prevents starting of engine if traction pedal is out of neutral. Stops engine if operator leaves seat or if parking brake is "on" with traction pedal out of neutral. Prevents engaging of PTO if operator is out of seat, engine off or all decks raised. Prevents engagement of high range ground speed mode if a cutting unit is lowered or engine is off.
ELECTRICAL FEATURES	12 volt automotive type electrical system. Dual maintenance free batteries, cold cranking 1300 amps at 0°F (-18°C), 250 minute reserve capacity at 80°F (27°C). 35 amp alternator with V/C regulator/rectifier. Seat switch, PTO and traction interlock system.
OVERLOAD PROTECTION	A 40 amp circuit breaker with reset button is located under the control panel for protection of the entire wiring circuit. The inputs to the solid state controller are protected by a 5 amp fuse for logic and two 15 amp fuses for the power circuits. ATO type fuses.
SEAT AND STORAGE	Deluxe seat with armrests, backrest and suspension. Adjustable for weight, fore/aft travel and height. Large tool tray storage located under hinged floor plate. Small storage and beverage holder beside control panel.
IMPLEMENT DRIVE	Hydraulic implement drive to all cutting units.
CUTTING UNIT CONFIGURATION	Consists of one 92" (234 cm) front center Triflex cutting unit and two 57" (145 cm) outboard cutting units.
MOWING RATE/WIDTH	Mows up to 14.5 acres/hr (5.9 hectares/hr) at 7.5 mph (12.1 km/h) with use of all cutting units. (Assumes no overlap and stops.) Total cutting width: 192" (488 cm).
HEIGHT OF CUT RANGE	Low range: 1-4" (2.5-10.2 cm). High range: 2.5-5.5" (6.3-14 cm).
CUTTING UNIT CONSTRUCTION	10 gauge steel, 5.5" (14 cm) deep shell. Welded construction reinforced with 7 gauge plates and 10 gauge channels. Leading edge constructed in closed triangular cross section to provide additional reinforcement.
BLADES	20" (50.8 cm) long, .25" (6.3 mm) thick, 2.5" (6.3 cm) wide, heat treated steel blades. Triflex cutting unit: 5 blades. Outboard cutting units: 3 blades each. All blades and spindles are interchangeable.
ANTI-SCALP DEVICES	Each cutting unit equipped with adjustable skids. Anti-scalp cup located on each blade.
CUTTING UNIT COVERS	Impact resistant molded plastic covers. Four covers per Triflex and two per outboard cutting unit. Easy to remove and replace without tools. Held down with high strength permanent magnets.
PATENTED AUTOMATIC WEIGHT TRANSFER	Automatic hydraulic counterbalance transfers weight from the cutting units to the traction unit for improved traction and better deck flotation. Under demanding traction situations the system automatically transfers additional weight from the cutting units to the traction unit.
WARRANTY	Two year limited warranty. Refer to the Operator's Manual for further details.
CERTIFICATION	Certified to meet ANSI specifications B71.4-1990 and applicable Federal

Grounds and Industrial Management

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and State OSHA regulations based thereon.

* Specifications and design subject to change without notice.

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12/28/2000

JA - 0293

GCSAA SHOW 2/98
SAN DIEGO, CA

Model 425D



"Quality Rotary Mowers For A World That Isn't Flat"



The Model 425D...Redefining Performance Standards

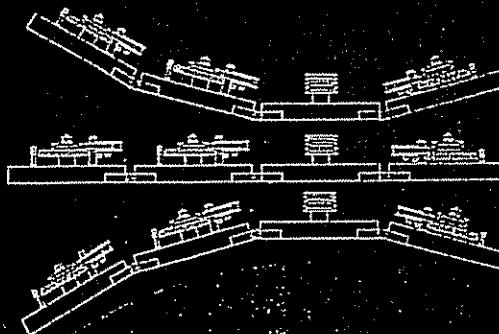
Every few decades a piece of equipment redefines a product category. Get your dictionary out. Under commercial finish mowers cross out the highest standard and replace it with just one thing... The LasTec Model 425D.

Human nature is an amazing thing. We tend to follow each other. Sometimes there are good reasons to do this. Sometimes there aren't. For example, consider rotary finish mowers. A few decades ago a company turned a farm tractor backwards and put a fixed 72" deck on the front. It was easier to maneuver and the operator didn't need to look backwards to keep from crashing the deck into trees. People started buying them. Other manufacturers saw what was happening and followed. Pretty soon everybody had one and commercial finish mowers were defined.

Manufacturers then stopped looking for better ways to mow. They were too busy building backward tractors with six-foot decks. They didn't hear the discontent. Most people didn't like to scalp grass, but six-foot wide finish mowers had to scalp, didn't they? Most people wanted more width, but wouldn't that have made the scalping problem even worse? Most people would have liked to change cutting heights from the seat, but decks on backward tractors couldn't do that, could they? Scores of operators were injured over the years because their mowers tipped over when they cut steep banks, but all mowers just did that, didn't they? Weren't these areas supposed to be cut by hand? As odd as it seems, most people just accepted these myths.

In 1990 LasTec exposed the myth that wide decks need to scalp with the introduction of our PTO-driven Articulator. Now we are exposing a similar myth about self-contained finish mowers with our revolutionary Model 425D. Our decks are 8 feet wide and over three times as accurate as everyone else's six-foot deck. Our extra width makes us more productive and lets the deck reach over 2 feet past the trim side of our drive unit. This lets us reach over and under things that used to require hand mowing. Our scuff-proof, zero-turning-radius configuration means that we don't need a 15 foot circle to turn our mower around. We also handle side banks that can tip most mowers upside down and we can even change cutting heights from the seat. Aren't all of these features any customer would like on a finish mower? We think so, but backwards tractors can't do those things. LasTec's Model 425D Articulator can.

We could go on and on about the hundreds of other things you can do with our mower that older equipment can't do, but we won't. We simply ask you to consider leading instead of following the crowd.



Four 25" articulating cutting decks duplicate the cut quality of four individual push mowers.

The Articulator. The best performance.
The best quality. The best value. The best, period.

The 425D Articulator Specifications

Configuration	Unique Front/Mid-Mount Low Center of Gravity
Engine	Kubota 4-Cylinder 38HP Water-Cooled Diesel
Drive	Hydrostatic Transmissions with Dual High and Low-Pressure Coolers
Drive Tires	24" Diameter, 13" Wide Turf-Tread
Primary Deck Drive	Gearbox through Electric Clutch/Brake
Deck Drive	Patent Pending, Highly Efficient Self-Adjusting Belt Drive
Deck Width	96" Cutting Capacity with 30" Trim Side Overhang
Cutting Height Range	1" to 4"
Deck Type	Four Articulating 25" Rotary Decks That Side-Discharge or Mulch
Deck Construction	3/16" Steel Plate Weldments with Rebuildable Spindles and Spindle Housings
Hydraulic Controls	Standard Auxiliary Hydraulics with Control Valve
Overall Weight	2015 Pounds
Overall Dimensions	98" Wide, 90" Long, 39" Tall (at top of seat), 64" Tall (at top of roll bar).
ROPS	Certified Roll Bar Standard
Lights	Headlights and Flashers Standard
Options	Sun Canopy, Golf Ball Net, Blower, Snow Blade, Sweeper

Specifications subject to change without notice. Patents Pending.

Phone 1-800-515-6798

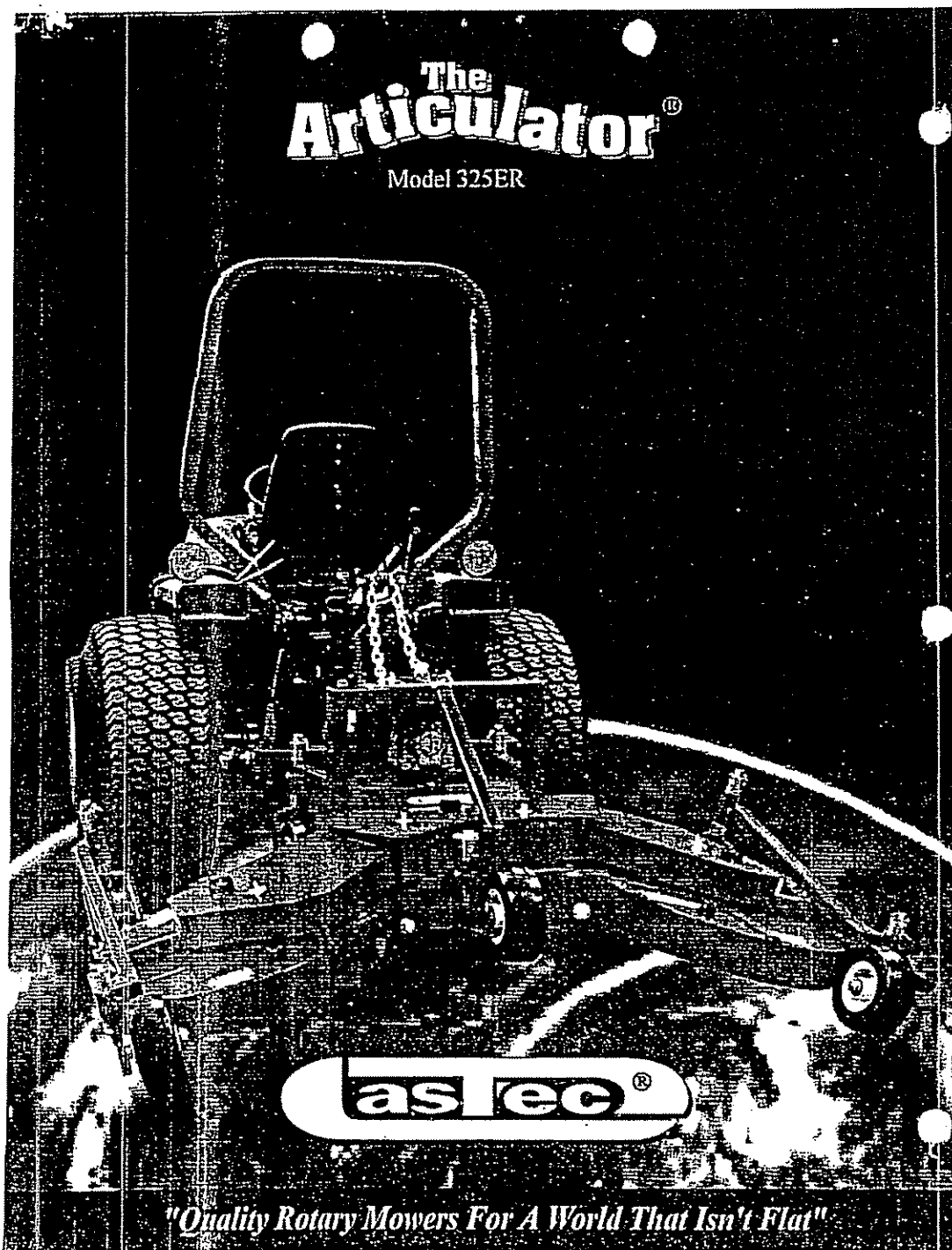
Call for the LasTec dealer nearest you.

Indianapolis, IN 46214-2400 • (317) 273-1122

<http://www.lasotec.com>

Fax: (317) 271-4225

Limited dealer opportunities available.



Introducing the Model 325LR Articulator

A PTO Driven 72" Articulating Grooming Mower That Thinks It's Three 25" Push Mowers

The world's finest golf courses cut with Articulators because they can afford the best. Now the best has become more affordable. The Model 325ER is a three deck version of the Articulators that cut the extreme terrain of the best championship courses. No scalping. No missed grass. That's the Articulator trademark. A trademark of perfectly grooming the most extreme green surrounds, elevated tee beds, bunkers, or even the contours of your backyard.

Side discharge and mulching capabilities make the Model 325ER safe and versatile for any finish mowing application. Coupled with a small utility tractor, it surpasses the productivity and quality of self-propelled mowers at a fraction of their cost. The rear mounted location and high lift blades even eliminate tractor wheel marks. The Articulator. The best quality. The best value. The best period.

Three 25" articulating cutting decks duplicate the cut quality of three individual push mowers.

GCSAA SHOW 1997
LAS VEGAS

The Model 325ER Articulator can be powered and transported by small utility tractors with under 20 HP

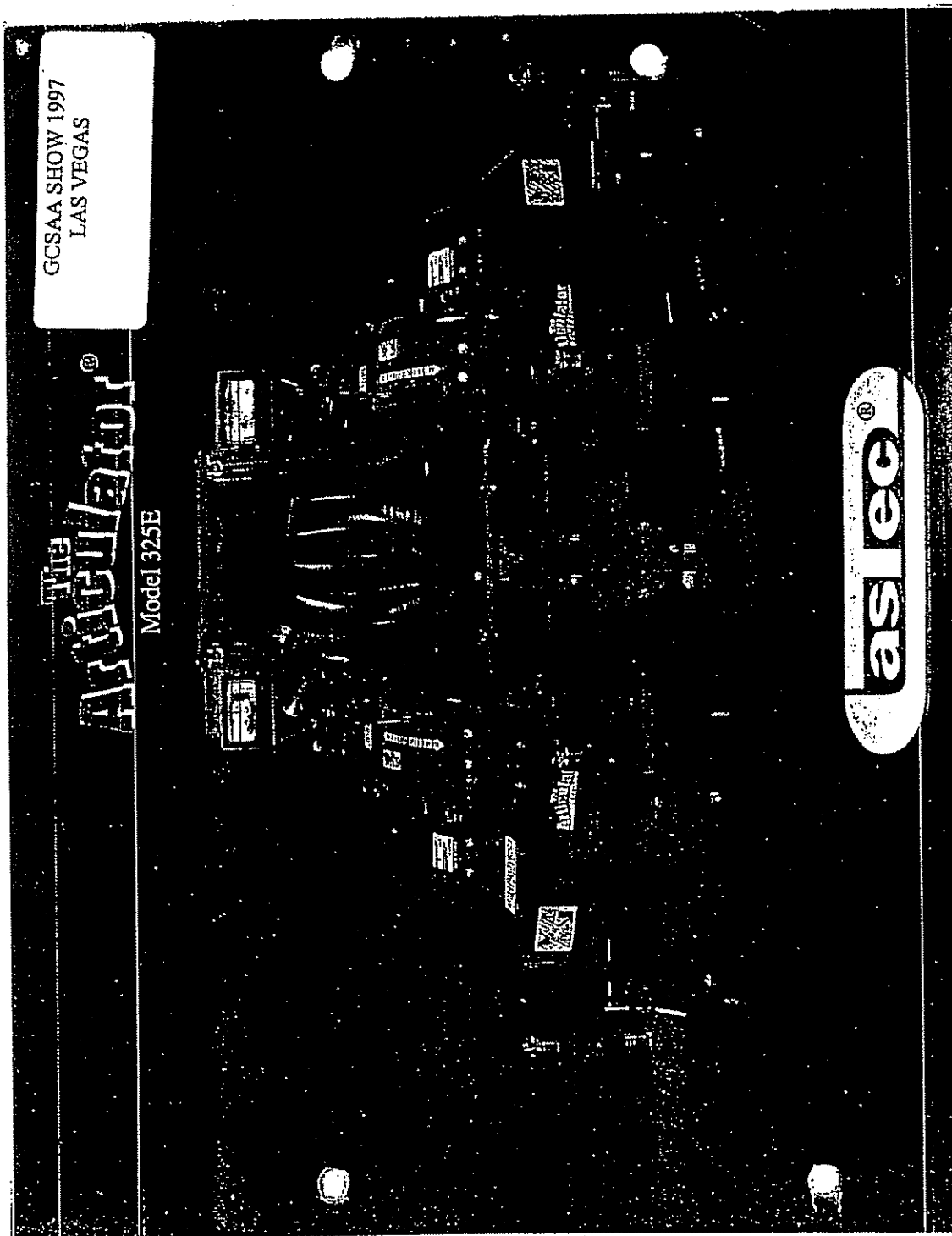
The Model 325ER Articulator General Specifications

Overall Cutting Width.....	72"
Cutting Deck Diameter.....	25"
Cutting Height Range.....	1" to 4"
Cutting Deck Pan Material.....	3/16" Steel Plate
Weight.....	490 lbs.
Tractor Requirement (minimum).....	18 HP 540 RPM Category One 3-Point Hitch
Drive System.....	PTO Shaft to Right Angle Gear box to Belts
Blade Tip Speed.....	17,000 FPM (@ 540 RPM PTO Speed)
Blade Type.....	25" x 2 1/2" x 1/4" Rotary, High Lift, Hardened Steel
Wheels.....	9" Diameter Urethane Filled, 3/4" Automotive Tapered Roller Bearings, Rebuildable
Blade Spindles.....	1 1/4" Diameter, Sealed Ball Bearings, Greasable, Rebuildable
Wheel Yoke Pivot Collars.....	Sleeved With Bronze Bushings, Greasable, Rebuildable

Patents Pending. All Specifications Subject to Change Without Notice. Printed in the USA

The
Articulator®

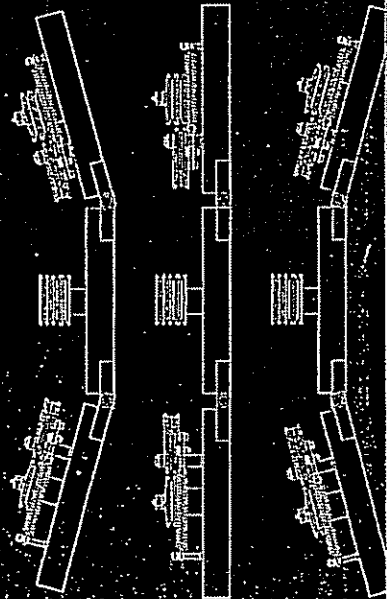
Artic Inc. 7865 N. CR 100E, Lizton, IN 46149 Phone (317) 892-4444 Fax (317) 892-4188



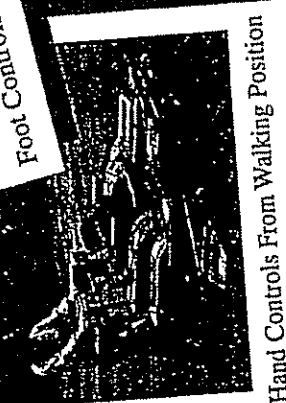
In 1492 Columbus Discovered That The World Wasn't Flat

Over Five Centuries Later LasTec Did Something About It

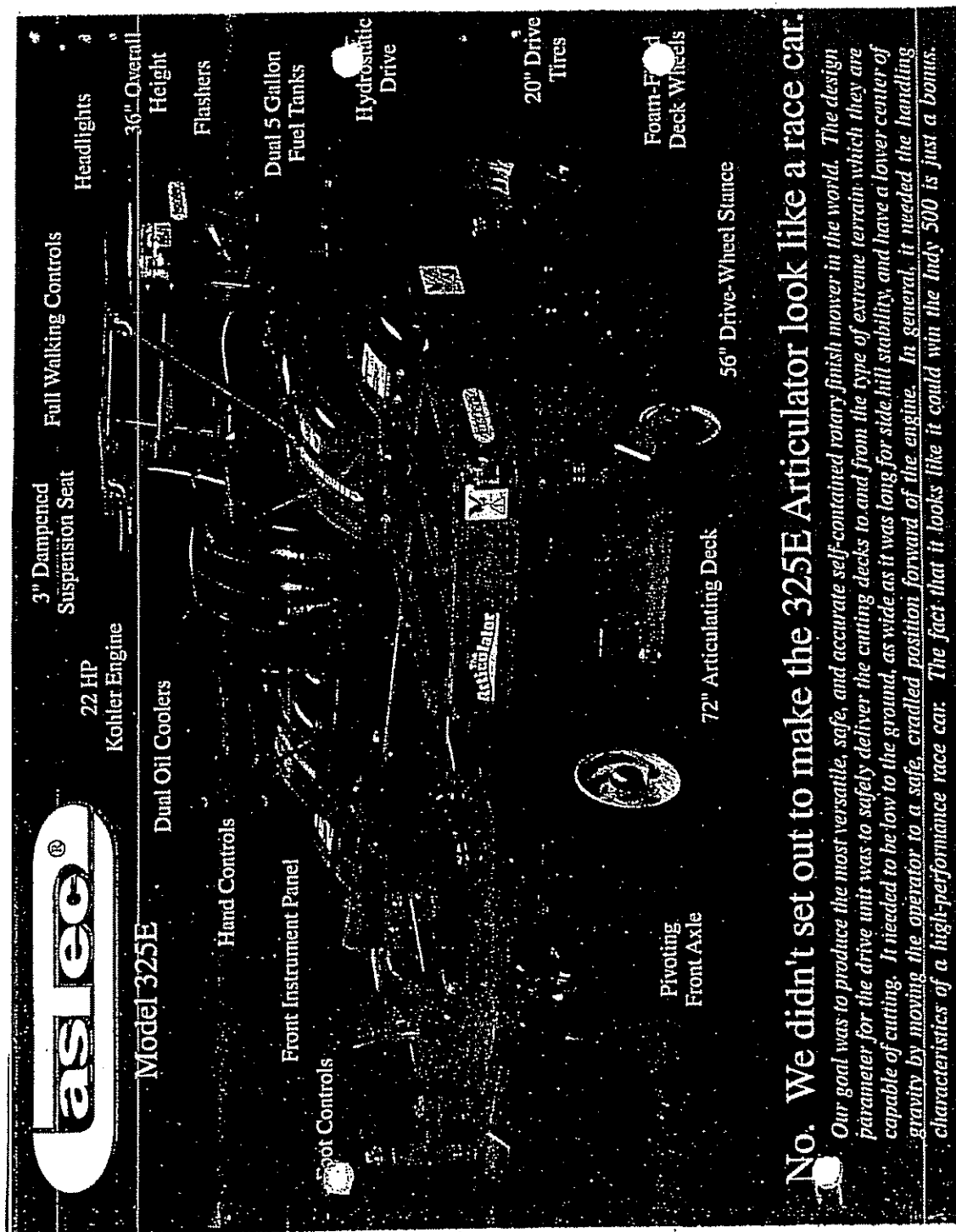
LasTec builds quality mowers for a world that isn't flat. That's why our 325E floats three 25" decks to cut a 72" path and why it's wide and low to the ground. We believe contoured ground should be cut, not scalped. The best turf professionals in the world agree. That's why every active player in the PGA has played on grass cut by an Articulator. Discover the difference. Discover LasTec.



Use any of
three control
positions



Hand Controls From Riding Position



aslec®

Model 325E

3" Dampened Suspension Seat

22 HP Kohler Engine

Dual Oil Coolers

Full Walking Controls

Headlights

36" Overall Height

Flashers

Dual 5 Gallon Fuel Tanks

Hydrostatic Drive

20" Drive Tires

Foam-Filled Deck Wheels

56" Drive-Wheel Stance

72" Articulating Deck

Pivoting Front Axle

Hand Controls

Front Instrument Panel

Foot Controls

Articulator

No. We didn't set out to make the 325E Articulator look like a race car.

Our goal was to produce the most versatile, safe, and accurate self-contained rotary finish mower in the world. The design parameter for the drive unit was to safely deliver the cutting decks to and from the type of extreme terrain which they are capable of cutting. It needed to be low to the ground, as wide as it was long for side hill stability, and have a lower center of gravity by moving the operator to a safe, cradled position forward of the engine. In general, it needed the handling characteristics of a high-performance race car. The fact that it looks like it could win the Indy 500 is just a bonus.